

## A DELAY CIRCUIT THAT SCALES WITH CLOCK CYCLE TIME

### ABSTRACT OF THE DISCLOSURE

A circuit having a process, voltage, and temperature (PVT) invariant delay  
5 element is disclosed. In one embodiment, the present invention includes a first and  
second operational transconductance amplifier (OTA), a first and second switched  
capacitor driven by a clock, and a first and second clock-controlled switch. In addition,  
the present invention includes a trip inverter, a delay inverter, and a plurality of  
transistors. In so coupling the first and second OTA, the first and second switched  
10 capacitor, the first and second clock-controlled switch, the trip inverter, the delay  
inverter, and the plurality of transistors, a circuit having a PVT invariant delay element  
is provided.